

Samson, Harvey S.

2018 – 00542

Exercise 5: Volumes

- Setting up the server

```
MINGW64/c/Users/Harvey Samson/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes
Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~ (master)
$ cd '/c:/Users/Harvey Samson/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes'
Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker run --rm -d --name apache -p 80:80 httpd:2.4
Unable to find image 'httpd:2.4' locally
2.4: Pulling from library/httpd
69692152171a: Pulling fs layer
7284b4e0cc7b: Pulling fs layer
3678b2d55ccd: Pulling fs layer
aeb67982a725: Pulling fs layer
06954f8169fd: Pulling fs layer
aeb67982a725: Waiting
06954f8169fd: Waiting
7284b4e0cc7b: Verifying Checksum
7284b4e0cc7b: Download complete
3678b2d55ccd: Verifying Checksum
3678b2d55ccd: Download complete
06954f8169fd: Verifying Checksum
06954f8169fd: Download complete
aeb67982a725: Verifying Checksum
aeb67982a725: Download complete
69692152171a: Verifying Checksum
69692152171a: Download complete
69692152171a: Pull complete
7284b4e0cc7b: Pull complete
3678b2d55ccd: Pull complete
aeb67982a725: Pull complete
06954f8169fd: Pull complete
Digest: sha256:48bae0ac5d0d75168f1c1282c0eb21b43302cblb5c5dc9fa3b4a758ccfb36fe9
Status: Downloaded newer image for httpd:2.4
63a5f425bd7c4864ef67b3662b084121415b95107ddb438a5eaba7f4aa13cda
Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ curl localhost
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 2176 0 2176 0 0 425k 0 --:--:-- --:--:-- --:--:-- 425k<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
<html>
<head>
<title>Bitnami WordPress Stack</title>
<link href="/bitnami.css" media="all" rel="stylesheet" type="text/css" />
<meta http-equiv="content-type" content="text/html; charset=UTF-8">
<meta http-equiv="content-type" content="application/xhtml+xml; charset=UTF-8">
<meta http-equiv="content-style-type" content="text/css">
<meta http-equiv="expires" content="0">
</head>
<body>
<div class="container">
<div id="header">
```

```
<body>
<div class="container">
<div id="header">
<table class="tableHeader">
<tr>
<td></td>
</tr>
</table>
</div>
<div id="lowerContainer">
<h1>Awesome! WordPress is now installed.</h1><br/>
<h1><a id="bitnami-link" href="wordpress/">Access WordPress</a></h1>
</div>
<table class="tableParagraph">
<tr>
<td class="container">
<p>You just installed WordPress using Bitnami - the fastest, easiest and most secure way to deploy your favorite app.</p>
<br/>
<table>
<tr>
<td>
<a href="wordpress/"></a>
</td>
<td>&nbsp;</td>
</tr>
</table>
<ul>
<li><a id="wiki-application-link" href="https://docs.bitnami.com/installer/apps/wordpress/">documentation page</a> for more information on managing your installation.<br/></li>
<li><a href="phpmyadmin/">phpMyAdmin</a>. For security reasons it is only accessible when using 127.0.0.1 as the hostname.<br/></li>
<li>Find answers to common questions or pose a new question on our <a href="https://community.bitnami.com/">community forum</a>.<br/></li>
</ul>
</td>
</tr>
</table>
<p>Thanks for using Bitnami!</p>
</div>
</body>
</html>
Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker cp index.html apache:/usr/local/apache2/htdocs/
Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ curl localhost
% Total % Received % Xferd Average Speed Time Time Time Current
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```


- Managing volumes, mounting volumes on containers

```
MINGW64/c/Users/Harvey Samson/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes
Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker volume ls
DRIVER      VOLUME NAME
local      httpd_htdocs

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker volume create myvolume
myvolume

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker volume ls
DRIVER      VOLUME NAME
local      httpd_htdocs
local      myvolume

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker volume rm myvolume
myvolume

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker volume rm httpd_htdocs
httpd_htdocs

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker volume create httpd_htdocs
httpd_htdocs

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
docker: Error response from daemon: Conflict. The container name "/apache" is already in use by container "74b6eba006509c84d2ed8c8aac73e88dec186a386f1f0c7208c10851acfc71f0". You have to remove
(or rename) that container to be able to reuse that name.
See 'docker run --help'.

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
samson/ping         1.0         d1902fcb0c46  17 hours ago  139MB
harveysamson/ping   1.0         d1902fcb0c46  17 hours ago  139MB
httpd               2.4         39c2d1c93266  4 days ago   138MB
ubuntu              16.04       9ff95a467e45  10 days ago  135MB

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$
```

```
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$ docker cp index.html apache:/usr/local/apache2/htdocs/

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ curl localhost
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload  Total   Spent    Left   Speed

100 2176    0 2176    0    354k    0 --:--:-- --:--:-- --:--:-- 425k<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
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<table class="tableParagraph">
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</ul>
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<p>Thanks for using Bitnami!</p>
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Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker stop apache
apache

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
50cda916a164b285015d565820f740d3b4edc6768ecf30abc5a184d85927d23e

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
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```

- Mounting host directories on containers

```
MINGW64/c/Users/Harvey Samson/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes
Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ pwd
/c/Users/Harvey Samson/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker run --rm -d --name apache -p 80:80 -v /c/Users/Harvey Samson/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes:/usr/local/apache2/htdocs/ httpd:2.4
docker: invalid reference format: repository name must be lowercase.
See 'docker run --help'.

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
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Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker run --rm -d --name apache -p 80:80 -v users/harvey samson/documents/github/me8_containerization_and_docker/5-volumes:/usr/local/apache2/htdocs/ httpd:2.4
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See 'docker run --help'.

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker run --rm -d --name apache -p 80:80 -v "users/harvey samson/documents/github/me8_containerization_and_docker/5-volumes:/usr/local/apache2/htdocs/" httpd:2.4
docker: Error response from daemon: create users/harvey samson/documents/github/me8_containerization_and_docker/5-volumes:c: "users\\harvey samson\\documents\\github\\me8_containerization_and_docker\\5-volumes\\":c: includes invalid characters for a local volume name, only "[a-zA-Z0-9][a-zA-Z0-9_-.]" are allowed. If you intended to pass a host directory, use absolute path.
See 'docker run --help'.

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker run --rm -d --name apache -p 80:80 -v "/c/users/harvey samson/documents/github/me8_containerization_and_docker/5-volumes:/usr/local/apache2/htdocs/" httpd:2.4
66f6877645ad5cc0de1967f6444ceba2409e463e43d5fd9dc479f950e326ff0a

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ curl localhost
% Total % Received % Xferd Average Speed Time Time Time Current
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</table>
</body>
</html>

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ docker stop apache
apache

Harvey Samson@LAPTOP-9P79PBHG MINGW64 ~/Documents/GitHub/ME8_Containerization_and_Docker/5-volumes (201800542_Samson_release)
$ |

```